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ACTIVITIES, TRANSACTIONS AND AWARDS OF THE HUNGARIAN ACADEMY OF SCIENCES



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FOREWORD

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1. NEW DEVELOPMENTS, PROBLEMS, AND EVALUATIONS IN THE OPERATIONS OF THE HUNGARIAN ACADEMY OF SCIENCES

Pages 299-326

Ferenc Erdei, First Secretary

Т

Ten years ago it was established both in the law pertaining to reorganization and in the Charter, that the Academy of Sciences should develop into the responsible directing organ and esteemed center of scientific life in Hungary.

The law pertaining to the reorganization of the Academy was based on the idea that "a center must be created which will be able to place the total scientific forces of the country in the service of the building of socialist society through development and

systematic organization of the functioning of the theoretical and applied sciences." In the furtherance of this goal the law summarizes and defines the role and tasks of the Academy as "the highest scientific institution of the Hungarian People's Republic: directs at the highest level and according to plan the functioning of theoretical and applied sciences."

Looking back upon the decade which has passed since reorganization it may be established that the Academy actually has
become the highest institution of Hungarian scientific life, the
center of domestic scientific research, and has achieved international
recognition. However, it has not become the sole organizational
center of the planned direction of theoretical and applied sciences
throughout the country.

The role filled by the Hungarian Academy of Sciences in the central direction of scientific life was decisively effected by the fact that since passage of the law pertaining to reorganization an entire series of new scientific institutions and directing organs were established, in addition to expansion of the Academy's own network of institutes. The ministries have built up the network of industrial, agricultural, etc. institutions, along with the appropriate directing organs. In addition to the 35 scientific institutes of the Academy, more than 70 other institutes were created, 15 of which organizationally are under ministries, or organs of national authority. Also, state central directing organs were created for direction of book publishing, libraries and technical development, and the supervision of scientific associations was decentralized. As a result, the conditions for central scientific direction by the Academy as established in the law pertaining to reorganization were considerably altered.

The domestic developments and the scientific organization experience of the friendly socialist countries lead to the conclusion that unified and planned organizational direction of scientific life may be provided solely by a high level state organ which is equipped with every prerequisite necessary for accomplishment of this task. In conformance with this, central direction of scientific life in the socialist countries is provided by the Council of Ministers. In this function the council relies upon an organ or organs which are directly responsible to the Council of Ministers and can perform central coordination of scientific life (development of plans, making recommendations for distribution of funds, continuous organization of coordination, etc.) without reducing the central scientific role and responsibility of the Academy.

A similar trend has developed in the solution of this problem in Hungary. In June 1957 the Council of Ministers passed a resolution pertaining to the organization of the Scientific and Higher Education Council, for the purpose of effecting "theoretical direction

of scientific research, coordination of scientific research and higher education, and bringing about a closer relationship with production." A resolution also was passed pertaining to development of the organization of technical development. Thus, under the conditions prevailing in Hungary the problem of national scientific direction is resolved through the division of labor between three central scientificorganizational bodies: the Scientific and Higher Education Council, the Academy, and the technical development organization.

During the past year the Presidium discussed from many aspects the realistic and proper determination of the present and future tasks of the Academy, and a unanimously clarified standpoint and charter modification now may be presented before the plenary session.

It is quite clear that the Hungarian Academy of Sciences, as the highest scientific body and highest-level scientific institution of the Hungarian People's Republic, must continue to be one of the centers of scientific life in Hungary, and to fill a leading role in the national direction of scientific life. However, the Academy cannot manage all the tasks of central direction of the sum total of Hungarian scientific life in the manner determined by the law pertaining to reorganization of the Academy. Nevertheless, the Academy must undertake no lesser, and no less esteemed and responsible tasks.

The chief task of the Academy is the pursuit of science in its own institutions and with the academic support of the academic chairs of the universities. Toward this end the Academy organizes, directs and coordinates research in the fields of theoretical and experimental basic research and in the applied sciences. In the field of research of this nature the Academy also must fill a position of national direction, ensuring its effecting a theoretical-methodological direction influence also upon basic research not being conducted in its own institutes, and extending its surveillance over the entire development of science.

The further task of the Academy is to participate in the national direction of scientific activity and in the coordination of scientific research through multifaceted active mediation, and as the highest scientific body of the field of organized science, to extend thorough assistance to the state organs of direction of scientific life. Thus the Academy must fulfill its proper leading role in the scientific life of the country not as an organizational center, but through its scientific results and scientific organizational work.

Finally, it is the task of the Academy to mediate in all problems of the building of socialism, at the request of the party and the government and at its own initiative, through the development and resolution of which the Academy may extend scientifically founded, expert assistance.

Such determination of the tasks of the Academy enables sharper definition of the responsibility of the Academy, and will render

more effective its connection and cooperation with the state organs of direction of scientific life. Because the Academy is not the sole organizational center of the scientific life of the country, it must perform the tasks of the unity of scientific activity, and the planner direction and coordination of scientific activity together with the state organs instituted for this purpose. The chief task of the Scientific and Higher Education Council is National Plan Bureau, the Hungarian Academy of Sciences, and of other interested organs, and to develop the trends and schedules of the development of science. Thus the Scientific and Higher Education Council should not be further developed as a forum which takes a stand on important scientific problems, but as a national coordinating organ and as an organization of the Council of Ministers which prepares, and offers opinions and advice. The practical application of scientific results should be the task of the Technical Development Council, which is being organized at present. The whole of scientific direction organs is supervised in turn by the Council of Ministers, and provides for determination of the main trends of scientific investigation, and of the amount and proportions of distribution of funds.

This framing of the tasks understandably has definite consequences in the direction, and the development of the scientific organizational methods of the Academy. Primary emphasis is placed upon the Academy's responsibility for the pursuit of science in all fields governed by the Academy. This means that greater attention must be devoted to the Academy's institutes, to efficient exploitation of existing capacities, and to efficient development of the institute network. In addition, the single-goal aid funds and the opportunities presented by academic chair research must be better exploited, and reserves in this field must be focused on the most important research tasks. The coordination of research, and in this respect the leading role of the Academy, charges the Academy with the responsibility to ensure that the Academy's institutes shall become the specialized and ideological centers of their fields of science, and that the Academy's committees shall function as the national scientific forums of recognized esteem in their branches of science.

The new definition of the Academy's tasks also is important to the extent that advances must be made in the Academy leadership, and in its scientific policy and scientific organizational work methods. To the present time relatively little time and energy of the directing bodies was devoted to scientific problems per se, because these bodies were preoccupied with organizational, procedural and administrative matters. In the future, however, in the interest furthering the pursuit of the various sciences attention must be focused on the reslution of scientific problems in the Presidium, in the leadership of the various departments, and in the various committees, and resolution of material, organizational and personnel problems must be considered as the prerequisite for successful scientific work.

With respect to the tasks of the Academy, the past decade has been rewarding both in results achieved and in experiences gained. The Academy proved that it is able to fulfill the scientific organizational and directional-coordinational role which befalls it during the period of the building of socialism. Not only have extensive experiences been amassed in this respect, but with the assistance of the party and the government leadership the Academy now has adequate material, organizational and personnel reserves enabling it to undertake greater tasks both in the pursuit of science and in the meritorious development of scientific research.

II

The present charter defines the goal of the Academy as that of contributing to the realization of the social, public economic and functional tasks of the Hungarian People's Republic, the development of the other peoples who are building socialist society, and advancements of science serving the interests of all mankind.

Essentially the same goal was set for the Academy by the law pertaining to reorganization, and the ten years which have elapsed have produced no change in the aims of the goal. However, during this ten-year period all the more and varied experience was acquired by the Academy with respect to the absolute necessity of these theoretical-political goals to the achievement of a progressive science, and with respect to the fact that despite all undeniable development it still has been impossible to achieve a result in the activity of the Academy equal to that demanded in general by the interests of building socialism from science and especially from the highest scientific body of the people's democracy of Hungary.

The first secretary's report at the 1950 annual plenary session properly stated, in addition to establishing the fact of the shortcomings, that "lengthy and thorough development will be needed to realize completely our tasks of an ideological nature."

It is apparent that in this respect the development of the Academy was determined to a great extent by the circumstances of the general political development, and that there is considerable general development in the ideological and political progress of the Academy. This development, however, is not of an extent sufficient to permit judgement of the Academy at present as a completely socialist academy. During the years following reorganization creative application of the essence of Marxism-Deninism was hindered by dogmatic unilateral views and by mechanical adoption of Soviet examples, and after 1953 development was set back by revisionist attempts and by the renewal and growing power of bourgeois ideologies. Because of all these factors the process has not yet been achieved in the ideological-political development of the Academy which would fill our work entirely and in all fields with unanimously socialist content.

In the 1957 annual presidium report is was established that "the counterrevolution did not have such a telling, or deep effect in the Academy as in other areas of the intelligentsia, and it is equally doubtless that the consolidation process was relatively more rapid in the Academy than in other circles of the intelligentsia." Despite the foregoing, the same plenary session rightly made the ideological and political reinforcement of the Academy the main task of the Presidium. The fulfillment of this task evaluated by the 1958 annual presidium report as follows: "Realization of the Marxist-Leninist world outlook in scientific work has been the duty of the Academy in the past, also. Definite results have been achieved in this field but, as was established at the general session of the past year, our work in this respect has not been effective enough. Our work was greatly aided by the Hungarian Socialist Labor Party, which dealt with the situation of the Academy, and through its counsel and resolutions aided us to see our duties more clearly than in the past." The speaker then emphasized that "ideological work is the general task of the entire Academy, of every academy institution and of every academician. The viewpoint that work along this line is the exclusive task of persons working in sociology, or of the social science institutes, can hardly be considered proper. The world outlook problems must equally interest all scientific personnel, and knowledge, propagation and application of the dialectic materialism world outlook is absolutely essential in all branches of science."

On the basis of the evaluation accepted by the general session the task was established by the general session resolution as follows:
"It is considered to be the permanent task of the Hungarian Academy of Sciences to realize the dialectic, and historical materialist method, the marxism—Leninism world outlook, in all branches of science, and to further its creative application in scientific research work. Toward this end the central organs scientific deprenents and institutes of the Academy must strive to expand and deepen ideological orientation within the framework of both scientific sessions and debates, and in separately organized lectures and debates on world outlook."

Exactly one and one-half years later we may report that we have come closer to the established goal. First of all, there are Academy institutes and branches of science in which the creative spirit of maxism already has struck deep roots, and in these areas the results of socialist science are being produced in increasing proportions. Certain institutes and branches of science of the Academy, however, still have not reached this level. It is an encouraging phenomenon, however, that as a result primarily of the general political development of the people's democracy of Hungary, and of peace and of the forceful international increase of the forces of socialism, scientific personnel have come closer to socialism and for the most part are honestly striving to acquire the socialist world outlook

and to effect scientific application of the methods of dialectic materialism. Although our academy work also has a role in this process, we have no cause for passive contentment. Two problems, especially, must be recognized, and our resulting tasks must be clearly recognized.

Neither ideological-political conviction, or the development of world outlook, nor the creative application of the dialectic and historical materialism methods are generally spread throughout our scientific life. This gives rise to the task that we should assist acceleration of the reassuringly progressive process through more debates and with more convincing scientific preparedness. In this work an especially important role is played by our social science institutes and by all the scientists, whether communists or not, who have achieved recognition in this field through their work and scientific achievements. The Presidium has approved a program for this this year with more theoretical lectures and debates than ever before, and on the basis of this program an accelerating progress is beginning to take shape in the plenary session of the Academy, within the departments, and in the institutes.

On the other side of the problem, closer and more productive connections must be found between the communists and the politically active non-party scientists on one hand, and the more or less politically neutral academy members on the other. It is understandable that following the counterrevolution the primarily communists and certain non-party personnel assumed responsibility for the Academy and the tasks of consolidation. It also resulted, however, that some of the non-party personnel feel that they have no responsibility for the Academy, and may not assume a role in the organizational life, the scientific debates and ideological discussions of the Academy. Under the present conditions of our country, the present progress and expansion of our socialist development, it is our opinion that this situation and such attitudes are untenable.

In the central leadership of the Academy, the leadership of the departments and of the institutes, we must set ourselves the task of expanding the feeling of responsibility for the entire activity of the Academy, for socialist science and for the scientific furtherance of the building of socialism among the academy members and among the associates of the academy. This, however, is not the task solely of the leading organs of the academy. No member of the Academy can remain neutral in this question. Just as at the time of the founding of the Academy the matter of national improvement was the conscientious thought of every pursuer of science who held himself to be a respectable and progressive patriot, now the building of socialism and the socialist homeland demand the same thing from all pursuers of science. At that time our Academy was the agent which aroused the national spirit, and that fact is its ageless merit. At present the scientific work of the building of socialism is our calling, and responsibility for this is a matter for the conscience of everyone who is really a worker of science and a real patriot.

The organizational development of our academy during the past ten years has been of gigantic proportions, and much of this occurred during the past few years.

First of all, there has been great development in the institute network of the Academy. Although in 1950 we had only four institutes, this grew to 35 at the end of 1959, and two additional institutes were organized in 1960. The number of institute personnel of the Academy in 1950 was 56, which grew to 1,765 in 1959, and the annual budget of the institutes rose to more than 112 million forints during the ten year period. It must be mentioned here that the Central Physics Research Institute, which is the largest institute of the Academy, was transferred to the budget of the Council of Ministers, or the National Atomic Energy Committee, but remains an institute of the Academy from the point of view of science.

On the basis of the 1958 plenary session resolution the Presidium thoroughly examined the work of our institutes. Each institute was examined by a committee formed by the president, and their reports and recommendations were reviewed by the presidium and the department leadership, including the heads of the institutes, and the necessary resolutions were passed. (Because the History Institute. the Central Physics Research Institute and several smaller institutes were reviewed later, the results of these reviews are not included in the present report.) It may be established that this multifaceted review was the most important event in the activity of the past year of the Academy, and its beneficial effect already is felt in the institutes. The examination of the institutes also was found useful with respect to the whole of the Academy leadership: a large number of members participated in it, the collective feeling of responsibility toward the institutes was strengthened, and attention was focused on the scientific work sites as the most important point of the Academy.

The presidium summarized the results of the examination of the institutes in the following manner. With respect to the social science institutes: "The majority of the institutes examined conduct their research tasks in the respective branch of science on the basis of Marxism-Leninism, and the published works generally are of a Marxist character. During the past two years the institutes have undergone considerable development in the field of the domestic development of the Marxist social sciences. A majority of the institutes are making an effort to fulfill the ideological-scientific tasks deriving from the party and government policy. From among the institutes listed the Economics Institute is an exemplary ideological and research center of economics research, and the Political Science and Law Institute also may fulfill this role within a short period of time. With reinforcement, the History of Literature and the Philosophy Institutes will have created the conditions necessary for becoming the ideological centers

of their branches of science. Development along this line also is evident in the Geographical Research Group. Considerable change is necessary in the work of both the Linguistics Institute and the Folk Music Research Group if they are to be adequate to the goals for which they were created by the Academy."

With respect to the natural science and technical institutes the Presidium reported the following: "The Majority of the institutes examined are conducting successful research work and in general are satisfactory to the tasks established for them at the time of their founding by the Academy. Some of the institutes have developed into exemplary centers of basic research in their respective branches of science during the past years. These include the Mathematics Research Institute, the Central Chemical Research Institute with respect to a part of its research field, the Agricultural Industrial Administration Institute, which is conducting work of a pioneering nature and which has a significant effect upon its technical field; on the basis of their functioning to date the following also are developing along this line: the Martonvasar Agricultural Research Institute, the Central Medical Science Research Institute, the Oil Production Research Laboratory, the Technical Physics Institute and the Stereochemistry Research Group. Considerable thematic and political changes are necessary for attainment of the above goal in the Atomic Nuclear Research Institute, the Solar Physics Research Group, Soil Science and Agrochemical Institute, the Veterinary Science Research Institute, the Child Psychology Institute and the Geodetic and Geophysical Research Laboratory. In the latter institutes there are too many research themes, research is spread over too many subjects, rsources are not concentrated on the most important tasks and the research trend for the institute has not been definitely resolved.

On the basis of the examinations it may be established that part of our institutes, albeit the smaller portion, already fulfill the role of specialty and ideological center in their special fields. In a few of our institutes it was discovered that they were unable to fulfill the scientific tasks entrusted to them from the point of view of leadership and composition, and new heads had to be appointed and further scientific and political strengthening is necessary. A third group of our institutes is struggling with various difficulties, and although they rest on sound foundations several hindrances must be removed from the paths of their development and they are in need of various kinds of assistance. The resolutions pertaining to the latter have been passed and are in course of implementation.

A very important problem of the further development of the Academy and fulfillment of its tasks is the development of our network of institutes. At the last plenum the following opinion of the general assembly was expressed: "Within the framework of the Academy a continued effort must be made for the development of the institutes, and in addition to strengthening and developing the

existing institutes, the conditions for creation of new institutes must be developed within existing possibilities."

In this respect there are problems which arise from the fact that the institutes of the Academy were not established in proportion in the various branches of science. A greater proportion of institutes were established in the fields of the social sciences and mathematics-physics than in the other fields. In contrast, the Academy has only a few institutes in the fields of the technical and chemical sciences, and these still are struggling with the difficulties of getting under way. A special situation exists in the fields of medical science and agricultural sciences, where the sum total of institutes are under ministries. Under such conditions the extent to which emphasis should be placed upon the organization of new institutes, and the direction which this development should take are great problems.

In the field of technical sciences the 1958 president's report established the following program: "Our most important problems in the field of technical sciences are: establishment of the basic research base of the department, creation of academy institutes from the university work cooperatives, furthering development of the Technical Physics Institute and development of technical research, which at present is struggling with modest means, through the addition of more research personnel and equipment." Since that time both the presidium and the departmental leadership have been devoting their efforts to the realization of this program.

With respect to the chemical sciences, following thorough investigation and debate of the situation the presidium last year passed a resolution to the effect that the bases for two new institutes absolutely must be provided from existing means, because any delay would result in an irreparable lag. The presidium also considers development of the Experimental Medicine Research Institute to be important, and therefore a greater portion of the 1960 annual investment and budget funds of the Academy were devoted to this purpose, and to development of the technical and chemical institutes.

Thus in general we are following the institute development policy of exerting efforts for the creation of the lacking institutes and creation of the necessary personnel and ther prerequisites, and we are developing our existing institutes in the direction of the tasks established in the long-range research plan. In essence, this is a large-scale developmental program. Under existing circumstances we cannot assume a larger scale institute-development program because we would be unable to ensure the funds and the personnel research requisites of such a plan. This trend also was established in the 1958 plenary resolution, and we must advance in this direction in the future, also.

An important part of the organizational development of the Academy is comprised by the academic chair research projects, or the research-aid funds. In 1959 we devoted 33.3 million forints

from the budget, or more than 20 percent of the entire budget of the academy, to pay for 472 research positions, compared to 6.2 million forints for 100 positions in 1954, for the support of research conducted at academic chairs and in other institutions. This research support fund was divided between more than 300 academic chairs and other institutions.

During the past year the presidium place the many-sided investigation of this problem on the agenda, and after repeated debate arrived at a position, with respect to the further utilization of the research-aid funds. The standpoint of the presidium is that this research must be greatly developed at the universities and colleges, and until funds for the same are provided in the budgets of the universities the research-aid support of the academy absolutely must be continued. However, the formerly dispersed research grants must be concentrated in academic chair research groups and work cooperatives as much as possible, and must be handled similarly to academy institutes, or the nuclei of academic institutes. In addition, research grants may be connected to academy institutes, also, in order that their research capacity may be increased by this method. The presidium decided that this concentration should be carried out in two stages, in 1960 and 1961, andin the meantime the personnel and credit extended under research_grants may be increased only in exceptional, justifiable cases. The presidium also stated that the institute regulations pertaining to planning, reporting and personnel work also must be applied to research conducted under the research grants.

Experience to date indicate that despite definite organizational difficulties which arise this decision was sound, and we recommend that this be ratified by the general assembly.

Significant development has occurred in other institutions of the Academy, also, during the past ten years. The Academy Library at present is one of the largest and most important scientific libraries of Hungary, with 662,000 volumes of books and periodicals, approximately 3,000 microfilm works, and 219,000 volumes of old books and manuscripts. The Academy Library also is the network center of the academy institute libraries, and thus coordinates and supports the work of these libraries.

Following reorganization the Academy Publishing House received the task of fulfilling all the Hungarian scientific book publishing tasks. This understandably was unrealizable, but during the past ten years our Publishing House, together with the Printing House, have become the leading institution of Hungarian scientific book publication which not only has an outstanding domestic reputation, but also is recognized abroad.

During the ten-year period the Academy Publishing House published a total of 808 books, of which 457 are major independent monographs, 103 of which are foreign-language publications. The expansion of the activity of the Academy Publishing House also is indicated by the fact

that at present the Academy publishes 68 periodicals, 26 of which are in foreign languages. The increase in publishing of informative works is an urgent task of the future activity of the Publishing House. The Presidium recommends action along this line be taken by the general assembly.

The Martonvasar farm is an integral part of the Martonvasar Agricultural Research Institute, and as a farm has the special characteristic of comprising the scientific basis for the entire country's supply of hybrid planting corn so important from the point of view of development of agricultural production. In accord with this it has an independent hybrid corn plant equipped with considerable investments, which also was the experimental model of domestic institutions of this sort.

The Experimental Apparatus Executing Enterprise originally was created for resolution of the task of supplying the instrument needs of the Academy and other scientific institutes with respect to instruments which cannot be obtained from industrial manufacture and which are difficult to import. The enterprise worked along these lines for several years, but this activity understandably was accompanied by considerable losses. Because of this it made arrangements for the series manufacture of the most successful instruments, and it carries on considerable export of these instruments. However, this activity of the enterprise, together with economic and personnel faults, gave rise to dissatisfaction in academy circles, and because of this many persons made the retention of the enterprise questionable. Therefore the presidium dealt with this problem repeatedly, and following consultation with all persons concerned, determined the trend of the further functioning of the enterprise. In accordance with this the presidium does not object to the series production of individual items to the extent of economic utilization of the enterprise's capacity, but required KUTESZ to focus its attention again upon its original task and to consider its main task to be that of satisfaction of the individual instrument demands_of the Academy and of other scientific institutes. In 1959 KUTESZ Kutatasi Eszkozoket Kivetelezo Vallalat -- Experimental Apparatus Executing Enterprise/ made special instruments for 50 academy and university institutes.

The Instrument Affairs Service was organized for resolution of the task of centrally handling instruments which cannot be adequately explcited by individual institutions, and to make them available to the users upon demand. Toward this end the Instrument Affairs Service had 2,700 instruments at the end of 1959 with a total value of 17 million forints, which were loaned out in 6,800 instances, with a total instrument value of exactly 40 million forints. The second task of the Service is the establishment of the national instrument affairs register to create cooperation between organizations possessing instruments and potential instrument users. In 1959, it mediated 1,000 cases of instrument use on this basis.

The organizational development of the Academy was accompanied by a considerable annual increase in material-economy provisions.

The total budget of the Academy in 1950 was 1.5 forints, and in 1960 was exactly 168 million forints.

During the ten-year period we realized investments totalling 291 million forints, more than half of which, or exactly 150 million forints, were realized in 1957 and the years following. This investment sum was broken down as follows: construction 131 million, machinery 40 million, and other 120 million forints. Broken down according to investment purposes, we have institutes 61.5%, researchgrant institutes 5.8%, enterprises and the Instrument Affairs Service 21.1%, and headquarters, resorts and housing 11.6%. Listed according to the fields of science, the investments have the following order: the mathematical-physics sciences have the greatest share of the investments (112.6 million forints), followed by the chemical sciences (32.2 million), the technical sciences (16.9 million), and the remaining branches of science received considerably less investment funds. It must be mentioned that the outstanding portion devoted to the physical sciences is explained by the fact that enormous investments such as the Central Physics Research Institute were built at this time. It must be noted in connection with the portion devoted to the technical sciences that during the same period investments totalling several-fold greater than this amount were made in the industrial research institutes of the ministries.

These figures attest to the fact that our people's democracy not only placed great tasks and demands of great responsibility upon science and upon the Academy, but also provided exceptionally large amounts of material resources at their disposal. These provisions extended not only to the share of the scientific institutions, but also to the improvement of the personal circumstances of the researchers.

Thus it must be established that the expansion of the material framework of scientific work was of an extent during the ten-year period which under the circumstances of our country must be considered not only large-scale, but also generous. Nevertheless, the material requirements of our scientific activity pose not a few problems, more and more of which are handled by the presidium and by the leadership of the individual departments. In this connection, however, we must understand that this question has two sides. One aspect is that considerable further expansion is necessary in many respects, and the other is that we must deal more frugally with the funds available.

The most serious problems are those of location, or construction. This year the only major investments to begin, in addition to continuation of the construction of the Central Chemical Research Institute, are the Technical Physics Research Institute and the Experimental Medicine Research Institute, In addition to

these, we have the means for only very minor construction work. At the same time, the location of the library, the headquarters and the central organs of the Academy, and the better location of several of the Academy's institutes are urgent problems. Furthermore, we may count on only partial amelioration of this situation under the Second Five-Year Plan because as is well known in the Academy, also, during this period the investment capacity of the country must be applied primarily to the resolution of essential, urgent production-economy tasks.

Another disquieting economic problem of the Academy, which however has improved recently, is in connection with instruments. The procurement of both domestically manufactured instruments and imported instruments is accompanied by very great difficulties, partially because of the dearth of utilizable credit and partially because of the difficulties of transportation. A considerable improvement in this field is promised by the decision of the appropriate leading organs to the effect that a certain sum from the Technical Development Fund must be devoted to basic research goals each year, and this opens the possibility of the procurement of considerable quantities of instruments.

A constant problem of the Academy is the management of personnel reserves, despite the fact that the Council of Ministers afforded exceptional treatment to the Academy both this year and during the past year, through granting considerably more personnel than average for our institutes. This year we received 200 new personnel, although the combined demand of the various academy institutes was 580 personnel. Because of this the Presidium had a very difficult problem in the distribution of this limited personnel reserve. In this connection the attention of the general assembly must be called to the fact that although the scientific tasks of the Academy will be increased significantly, we cannot look forward to a large increase in personnel during the coming years. Because of this every academy institute must realize the most economical personnel management possible, merging this effort with the most efficient exploitation of existing capacity, of which a sizeable reserve remains.

Although these briefly described material problems cause constant worry, both singly and collectively, we must see that a gigantic expansion has occurred in this field during the past ten years, and our people's democracy development during the past decade and one half has expanded the material conditions for scientific research in general and for the Academy in particular, to an exceptionally great degree. Despite our frugal worries we must see that taken as a whole, the Academy has very great material-organizational capacity at its disposal, and thus we are charged with the exceptionally great responsibility of the type of use which is to be made of it. Both the presidium and the departmental leadership have

problems dealing not only with the formulation of their additional demands and with the increasingly effective justification of these demands, but also have the task of making the utilization of the existing capacity and of the annually increasing additional capacity increasingly effective. Our main task in this respect is to use our material means according to our scientific policy goals, and to overcome the resistence encountered in this field through efficient work.

The organizational development also has increased our tasks connected with organizational direction.

At the time of reorganization of the Academy the organization of the Academy was expanded with the addition of three new scientific departments: the biology and agricultural sciences department, the medical science department, and the technical sciences department. Not long afterward the department of chemical sciences was formed, followed by the formation of the biological group, which essentially functions with the nature of a department. This expansion of the scientific organization of the Academy understandably occurred in accord with the development of the forces of production in the fields of the applied sciences, or in accord with the demands of practice.

This developmental process, of course, cannot be considered ended. During the past year attempts were made toward the formation of a geology-geography department or group, and the biology group maintains its attempts to become a department on its daily agenda. In the judgement of the presidium the attempts at the formation of these new departments still have not matured to the point where a decision could be made in their favor. We consider it proper to ensure more independent functioning under the present means, but the establishment of organizational independence would not be proper at present, and a decision along this line may be made only when all the necessary prerequisites for this are available. Such action would require circumspect science-systematization considerations which, however, will be placed on the agenda as soon as possible. Lesser modifications may be made in the meantime, however, such as the decision of the Presidium, on the basis of recommendations of the leadership of the two interested departments, to transfer the science of demography from the organizational jurisdiction of the Sociology and History Department to the Linguistics and Literature Department.

The creation of new scientific departments and the increase in the number of institutes necessarily were accompanied by development of the leading organs of the Academy, and of the directionadministration methods of the academy apparatus. During the past ten years diverse developments and transfers occurred in this respect.

The office apparatus of the Academy had swollen increasingly during the years following reorganization. This necessitated large-scale rationalization in 1957, with almost 50% reduction. This

proved to be basically sound, although there was a crying demand for increasing capacity in the functioning of a few organs. The office organization of the Academy may be considered as established, but this does not mean that there are no problems remaining to be solved. These problems include primarily the relationship between the central organs and the secretariates of the various branches of science, the connections of the economic organs to the other organs, and certain problems of office administration.

At the last 1958 plenum charter modifications were made along with the introduction of several new organizational elements into the direction system of the Academy. Thus the Presidium Council was formed, with the task of performing the tasks of the presidium during the interim between two presidiums, and to perform preparatory work for the presidium with respect to problems of major importance. This organizational innovation proved to be useful, and the functioning of of the Presidium Council generally has satisfied the expectations which were attached to its work. Another significant organizational modification was that of enabling the election of non-academy members to the departmental leadership, and the appointment of non-academy member departmental assistant secretaries to aid the departmental secretaries. Both decisions proved to be correct, and the inclusion of young new forces in the leadership of the departments considerably reinforces the work of the departmental leaderships and eases the overburdening of academy members. Another organizational modification was theaestablishment of the office of the academy secretaries in 1957. Although the latter may be considered realized on the whole, the most correct formulation of these spheres of authority still require additional measures.

It may be said that on the whole the organization of the Academy is functioning well and is able to resolve the tasks which confront it. There are some problems, however, which require urgent resolution, during the present plenum, if possible.

A resolution of our last, 1958 plenum, expressed some very important principles in this respect, and places tasks before the executive organs of the Academy in accord with these principles. "The organizational framework of the activity of the Academy must be developed in a manner enabling realization of the basic organizational principles of socialist society and of the people's democracy state, in conformance with the peculiarities of the Academy. The proper ratio of centralization and decentralization must be found in the connections between the presidium, the departments, committees and institutes of the Academy, and the demands of planned direction absolutely must be realized in scientific work. This is the goal of the appropriate modifications of the charter, and through utilization of previous experiences the detailed order of the activities in the individual fields also must be defined more precisely."

According to this resolution the appropriate modifications of the charter will be placed before the present plenum, and we may report that a plan of organizational regulation has been prepared in accordance with the principles expressed in the resolution, and immediately after approval of the charter modification this will be placed before the presidium for ratification. The organizational regulation attempts to resolve all the problems which on the basis of experience must be realized with respect to the proper ratios between centralization and decentralization, coordination of collective leadership and individual responsibility, and with respect to the special work methods of academy direction in general. In this respect it is of outstanding importance that the most efficient sphere of authority of the academy secretaries be established, ensuring that responsably supplement the work of the president and the first secretary on one hand, and on the other hand offer greater assistance to the work of the president, first secretary, and departmental secretaries. In the direction of the Academy the situation is increasingly encountered in which the academicians are overburdened with administrative organizational matters. Although it is the responsibility of everyone of use to undertake these burdens, nevertheless we must strive to reduce this type of burden in proportion to existing possibilities. The presidium has dealt with this problem in many instances, and in individual cases has succeeded in finding a possible solution. However, this may not be considered satisfactory because other new burdens have been placed upon the presidium members, members of the departmental leadership, and especially upon academy members who hold academy office. Because of this additional efforts must be made to reduce overburdening. which is eased by the fact that on the whole the office organizations of the Academy are composed of excellent personnel who generally perform their work satisfactorily, and with proper organization of work are able to perform additional tasks.

IV.

From the very beginning the planned direction of scientific research has been the constant effort, and, it may be said, the concerted effort of the Academy, and in this respect the fulfillment of the tasks of a socialist-type academy always has been in the fore.

The law pertaining to reorganization prescribed that the Academy "shall direct at the highest level and according to plan the pursuit of the theoretical and applied sciences," and further, that "the plan for the determination and realization of scientific goals of national interest, the development of the national scientific plan, in conformance with the public economy plan of the Hungarian People" Republic" is the special task of the Academy.

Apparently these tasks were too new and too great for the Academy at that time. The susceptibility of scientific work to planning itself was a difficult problem for the Academy leadership. At the ceremonial session held on 19 December 1949 President Istvan Rusznyak emphasized the fact that "...hindrances have been encountered among the scientists representing bourgeois science, with respect to the scientific plan. The goal of science, they say, is the study of unknown laws, and the unknown can hardly be made the goal of a plan. Of course this does not refer to the relatively short-term plans which every scientist instinctively prepares for himself in the course of his research work, because without such plans the next day's experiments could not be carried to completion. By a plan we refer to the general, great, occasionally years-in-advance planning of scientific work, and I hope to be able to prove that this not only is possible, but is absolutely necessary." The referendum of the president thereafter elucidated the importance of the planned nature of scientific work, and the theories expressed at that time still are valid.

Despite the above, the first secretary's report at the 1950 regular annual plenum characterized the status of the development of the scientific plan to be very grave. "In the field of the development of the five-year scientific plan we have hardly advanced beyond the point inherited from the Scientific Council, and in fact it must be admitted that for the time being the formal, organizational problems of the scientific planning work still have not been solved. The cause of this is due in some measure to the fact that our scientific life still is carrying a great burden of remnants of the past capitalist times, and because of this part of our academicians still have been unable to break away completely from an often unconscious attraction to abstraction per se, while the other part runs to the opposite extreme, and instead of conducting scientific research determining the practice of the future they take as the goal of their scientific research almost exclusively the resolution of problems of daily practice, the limited field of practicism." The first secretary's report, however, correctly summarized the academy task in scientific planning, and the viewpoint expressed therein still is valid. Improvement of science planning work must be considered one of the most important immediate tasks of the Academy. Toward this end it is necessary to correct the errors appearing in the concepts of science planning work expressed by our academicians, and then the scientific plan of the Academy will become not only a formal, but an actual directing creation."

The Academy leadership also clearly saw that the planning of scientific work is closely connected with coordination of the research conducted at the various scientific institutions. This problem was brought up and emphasized in the first secretary's report before the 1950 plenum, andit also correctly indicated the way to its solution.

The Academy exerted great effort both in the planning of scientific research and in the interest of coordination not only in 1950, but in the years which followed, as well. The most significant result of the above was the development of the research plan connected with the Five-Year Plan, which, however, was not realized despite the great enthusiasm and the very great work which was conducted not without result. Because of this the Academy developed shorter-term plans from year to year, and on this basis created certain regularities in scientific work. Now, ten years later, the situation has ripened for the development of a broader research plan with the government's passage of a resolution in January of this year pertaining to the preparation of a long-range national scientific research plan.

At our last plenum two very important resolutions were passed concerning the duties of the academy with respect to the long-range plan of scientific research projects. The plenum declared that "The Hungarian Academy of Sciences must take maximum measures both through the work of its scientific departments and through the activity of its central organs to ensure that its long-range plan of scientific research projects be completed by the end of 1959, and that scientific research shall be conducted more in conformance to pdan on this basis. In this work the Academy shall consider as its main task the development of the scientific bases of this planning, and the realization of the needs of the development of long-range research projects and of science." The resolution further referred to the coordination tasks confronting the Academy in connection with the planning of research as follows: "In accordance with the purpose of its charter the Academy also considers as an outstanding task the realization of effective cooperation between the academy and ministry institutes and academic chairs in the main trends to be indicated in the long-range scientific research plan. The Academy also considers as its special responsibility the realization of coordination between basic and applied scientific research, and coordination of research in the field of scientific tasks requiring complex research. In this respect the activity of the academy committees, primarily, must be placed on more solid bases and developed."

One and one-half years after the passage of these resolutions we may report that all organs of the Academy took thorough roles in the preparation of the long-range scientific research plan to date, and on the basis of this work the situation may be summarized with the notation that this activity will continue to advance successfully in the future.

As is well known, the government decree pertaining to the development of the long-range scientific research plan established 104 main tasks of research, the direction of 47 of which was entrusted to the Academy. Immediately following the passage of the resolution

we established committees for preparation of the individual main tasks of research, in a manner ensuring that researchers and experts of the interested ministries participate in the committees established by the Academy, and that Academy representatives are included in all the committees of the research main tasks entrusted to the ministries. This task demands a new kind of work from all the organs of the Academy, and both the presidium and the departmental leadership, and especially the academy members heading the committees must undertake this work with great sense of responsibility and spare no effort to ensure the success of this undertaking.

Following the preparatory work, which up to this point has advanced successfully, the next task is not organizational work, but meritorious scientific activity. The task of the preparatory committees is the thorough development of the research program. The preparatory committees are replaced by the coordinating committees, the task of which is the realization of all necessary coordination, both on domestic and international scales, and later the discussion, debate and comparison of the research results obtained in the individual branches.

In many persons the question arose of whether the committees organized for the development of the long-range research plan and for the coordination of research would disturb, or render superfluous the work of the academy committees. The Presidium discussed this problem thoroughly during the past year, and arrived at the unanimous opinion that no such danger exists because both the academy committees and the committees serving the individual tasks of the research plan have definitely distinct tasks. The permanent bodies and functions of the academy committees in the individual branches of science are no less than fulfilling the role of a national forum for the respective branches of science. The committees established under the long-range plan, however, are special-purpose committees, which although not established for a definite period of time. are established for the period of the preparation or execution of a single scientific enterprise. In the event that the scientific field of an academy committee strictly coincides with the theme of individual tasks of the long-range scientific research plan there is no objection to the academy committee's filling the role of preparatory, and then coordinating committee if this task was entrusted to the Academy by the resolution, This occurs, for example, in the presidium committee for regional planning and in the case of research in cybernetics.

The preparatory committees already have been established, and on 1 April the Scientific and Higher Education Council discussed the tasks to be carried out with the presidents and secretaries of the committees.

The development of the long-range scientific research plan also furthers the development of the annual research plan of the

Academy. The long-range plan creates the basis upon which the annual research plans of the Academy are established, or in other words the 47 research main tasks entrusted to the Academy are considered the emphasized academy themes such as the Academy has attempted to establish in the past. Our annual research plan for the current year already show such a trend. The academy research plan for 1960 contains many research themes which are connected with the long-range plan, and many projects which may be considered preliminary research. During the current year we already have instituted the efficient methodological innovation of enabling the institute plans to become effective upon approval by the departmental leadership, and modifications determined by the Presidium are effected through later plan modification.

With respect to the planned direction of scientific research we may use the criterion of whether the efforts of the Academy produced results in the resolution of this particularly complex task. The result, however, has not reached the point at which plan-conformity and the necessary coordination are adequately realized in our scientific life, but we have reached a point at which the pre-requisites for this have been established, and work along this line has reassuringly begun. The academy did not attain this alone, but to the present time we have had a large part in it, and in the future we must continue to undertake the major part of this work.

٧.

Dealing with the personnel prerequisites of scientific work is a basic task of the socialist type of academy. With reorganization the Academy received the task of the organization and direction of the establishment of a new, young cadre of research personnel, and of doing all in its power to ensure that the older researchers who were educated in the old world devote their best to the scientific work of the building of socialism. The requisites of this task have changed a great deal with the passage of time and have been clarified to a greater extent, and in conformance with this the tasks of the Academy also have developed in many respects.

The most important change in this field is the fact that during the past ten years the Academy has acquired a considerable cadre of its own research personnel. In addition to the 146 academy members the scientific institutions of the Academy have more than 2,200 personnel, of whom approximately 890 are scientific associates, including those in administrative positions, and 300 scientific assistants. Based on this fact the scientific research personnel requisites of the Academy must be developed especially within this group. This is furthered by the new measure taken this year, according to which the Academy acquired 30 personnel posts for the purpose taking on scientific apprentices as the most convenient work sites to fill this replacement personnel reserve.

The personnel relationships of the academy institutions are rather uneven. We have institutes in which a research cadre with very good professional training and generally adequate political training already has been formed, but in other institutes there are various shortcomings either in scientific training or in political—ideological development. As a result, very complex personnel work requiring much circumspection and constant effort must be enducted within the Academy. Our main task in this field is acceleration of replacement and improvement of the conditions of development of replacement personnel, because we must maintain very high professional demands, and increased political requirements with respect to the young research cadre. The main weight of this work falls upon the directors, the departmental secretaries and assistant secretaries, and their work must be assisted by the central personnel bureau and by the academy secretary charged with the direction of personnel affairs.

The organizational framework and methods of personnel work had to be recreated anew in 1957 following the events of the counter-revolution. The government decrees and political directives pertaining to this contained in part the attempt to avoid the old errors in this aspect, and in part the decided attempt to ensure that personnel selection and furtherance of the development of the individual associates be more effective from the points of view of both professional and political standards.

The further tasks of the Academy with respect to the personnel requisites of scientific work appear in the academic qualification system.

The academic qualification system was consolidated following the confusion of the counterrevolution, and is definitely developing in its reorganized form. In this interest, as a result of extensive preparatory work in the Academy and within the framework of the universities, we were able to lay recommendations before the Council of Ministers and the Presidium of the People's Republic, as a result of which the earlier unsettled problems of academic qualification, and problems which later became questionable, were settled by legal decrees, decrees of the council of ministers, and various executive directives. In this connection elimination of certain earlier qualification errors was begun, not only through the application of more circumspection and thoroughness in the new admissions and qualifications, but also through increasing reexamination of the old aspirant certifications by the Academic Qualification Committee.

A relatively large number of admissions and qualifications have occurred since introduction of the academic qualification system. The number of domestic aspirants accepted since 1951 was exactly 2,500, and 230 foreign aspirants were accepted. During the same period 1,590 persons achieved the degree of candidate, and 324 took doctorate degrees. It is self-evident that the main source of scientific replacement personnel are researchers, who have academic

degrees and who for the most part are young, and professional experts However, there are some not readily soluble problems in this field. Part of the candidates are young researchers who have attended school in the Hungarian People's Democracy or in the Soviet Union, and thus became researchers through education under our system, but for the most grt they are youths, whose further development must be advanced with the greatest care. On the other hand, the persons having doctor's degrees are almost exclusively older researchers or professional experts from among whom it is very difficult to nominate academy members from year to year because most of those who may be considered for nomination already have become members of the Academy. Among the young candidates who only recently became doctors of science, on the other hand, the personnel are so young both from the points of view as men and as doctors of science that it would not be proper to speed their nomination for membership in the Academy. However, acceleration of their scientific development and accumulation of their international experiences are possible and are necessary to the extent that they must be considered one of our most important tasks.

In the interest of attaining this goal the Academy Presidium approved the scientific cadre replacement plan. The essence of this is that it makes the departmental leadership responsible for supervision of the work and development of the young candidates who show the most promising development through appropriate establishment of their work conditions, sending them on foreign study tours and having their older colleagues give them help, to enable them to attain as soon as possible a level at which they may be appointed to the most responsible scientific positions and may be considered for election to the Academy as soon as possible. The same goal was served by our measure providing for the election of departmental leadership members from among the young researchers, so that although not members of the Academy, they may participate in the work of departmental leadership as departmental assistant secretaries.

As is well known, the work of academic qualification is conducted independently within the Academic Qualification Committee. The committee, however, is under the supervision of the Academy, even though its members are appointed by the Council of Ministers, and thus the Academy bears the ultimate responsibility for the entire work of academic qualification. Therefore the Academy has very important responsibilities in this field. First of all the errors committed under earlier practice must be corrected, consisting in some cases of neglect of professional requirements, and in others neglect of political requirements, and a practice must be developed which conforms to the new resolutions pertaining to academic qualification. Our further task is to create the conditions for greater systematization of academic qualification. We must reach a point at which the training of suitable young personnel are provided for in all the fields of science in which there is a shortage, to enable

them to acquire academic degrees as soon as possible. Our most urgent task is to make a planned and effective effort in all the branches of science in which the esteemed, older researchers are not backed up by adquate replacement personnel. It is the combined duty of the Academy and the universities to ensure that graduate students in these fields may exploit all possibilities of foreign study tours and personal application in the rectification of these omissions.

All in all, the most urgent tasks of the Academy are in the field of scientific replacement personnel. Our greatest shortcomings from the demands of a socialist academy are in this area, and therefore this is where the greatest need for increasing our efforts lies.

VI

Furthering international scientific relations is one of the activities of the Academy which is of special importance, although it is mentioned neither in the law pertaining to reorganization, nor in the charter which was ratified at that time. Nevertheless, during the ten-year period a situation developed in this respect in which Hungarian science was represented internationally primarily and mainly by the Hungarian Academy of Sciences.

Our Academy has scientific cooperation agreements with 16 academies within the framework of the socialist camp. On the basis of the agreements we approve mutual work plans from year to year, which form the bases of the scientific cooperation and mutual study trips. On this basis mutual possibilities were created for 750 weeks of study trips in 1959, in which approximately 200 persons participated. These mutual, contracted study trips were realized, and within their framework the cooperation in scientific work is constantly broadening, in developing in increasingly intensive form up to the point of the performance of joint research.

In addition to the agreements, our expanded international connections with the friendly countries provide the possibility for certain additional mutual visits and exchange of experiences. On this basis a total of 540 foreign visitors came to Hungary in 1959, while 648 of us journeyed abroad.

The Academy as a body, or individual academy institutions or academy members hold membership in 112 international scientific organizations, the seats of which are in the capitalist countries. One of the important tasks of the past years was the continuation of these formerly neglected or broken memberships. This effort also had a role in the fact that during the past year 173 Hungarians left on scientific missions to capitalist countries, and exactly 100 from capitalist countries visited Hungary.

Mention must be made also of the domestic conferences in which foreigners participated. In 1959, 23 such conferences were held in Hungary, in which exactly 200 foreign guests participated.

The reorganized Academy has acquired varied experiences during the past ten years with respect to international relations, also, and these experience must be utilized in the future.

It may be accounted as a positive experience and significant achievement, that we have succeeded in expanding our international relations to a great extent and to deepen these relations in many aspects. These were especially assisted by our foreign-language publications, the Acta, the foreign study trips, arrangement of our membership in international organizations, and with respect to the socialist countries, the treaties. All this was made possible by the political conditions created by the logical peace policy of the Soviet Union and the socialist camp, and the foreign policy oriented toward consolidation of peaceful co-existence.

Our international relations, however, have several aspects which cannot be judged as positive, and this must be improved upon in the future.

One such worry is the character of our foreign study tours. A considerable number of the trips, and in fact almost all of them, represent short study trips of several weeks' duration. During the earlier years this was quite proper practice because the study trips involved essentially only general orientation and making contacts. At present, however, this cannot be considered satisfactory. What is needed at present is for the young researchers to make longer study tours, to gain a thorough knowledge of the language, and to gain thorough knowledge of the methods of the foreign schools. With respect to the short study tours it is no longer sufficient to gain general orientation, and concrete scientific tasks must be incorporated in the program of the tour, within the fields of either international cooperation, or in certain studies which are important to us.

Another problem arises in connection with the foreign international conferences. It is understandable that experienced, esteemed and internationally known scientists should be sent abroad to represent the Hungarian Academy of Sciences. However, we cannot be satisfied with the condition under which young research may participate in foreign congresses or conferences very rarely. Our interests in the acquisition of international experiences by our young researchers are so great that their participation in foreign conferences must be provided for even at the cost of sacrifices. One method by which this may be accomplished would be to have younger colleagues accompany older scientists, and to sacrifice the participation of a few of our representatives at other conferences, instead.

A change is necessary in the organization of domestic international conferences, also. Our conferences to the present time, which included the participation of foreigners, have been mostly showy, representational ceremonies, and meritorious scientific work most often has been relegated to the background. This is understandable

in individual branches of science on the occasion of the first such conference, and there may be need for such conferences in the future. In general, however, a different character must be imparted to international scientific gatherings held in Hungary, the work conferences and symposia limited to a narrow field and for the discussion and debate of more strictly limited scientific problems must be emphasized, to enable the development of deeper scientific exchange.

Finally, scientific cooperation with foreigh scientific institutions within the field of definite mutual scientific under-

takings must be greatly developed.

Thus in the field of international relations we may boast of no mean results, and the international esteem of the Hungarian Academy of Sciences also has developed nicely. However, on the basis of our results and experiences to date we must set new tasks for ourselves and must strive for their realization.

VII

Gigantic development began in Hungarian science following Liberation, and especially since the beginning of the building of socialism, and this is expressed in scientific achievements, and research results.

The great transformation which occurred in the development of our country also turned our scientific development in a basically new direction. Scientific life in Hungary prior to Liberation presented an exceptionally irregular outline, and although there were outstanding achievements in individual areas, on the whole it was underdeveloped.

After Liberation, and especially beginning with the commencement of the building of socialism, a revolutionary transformation took place both in the degree of organization of scientific research work and in its ideological-world outlook content, especially with respect to the ratios between the individual branches of science, and most of all with respect to the connections between science and practice.

Prior to Liberation basic research, both in the social sciences and in the natural sciences. was conducted almost exclusively at the university academic chairs, and applied research was conducted exclusively at the factory laboratories and on the experimental fields of the large estates. Therefore, first of all the network of independent research institutes had to be built up.

Under the science of the counterrevolutionary capitalist system reactionary idealist trends prevailed in the majority of the fields, and even the bourgeois democratic progressive attempts became isolated. The basic task was the expansion of the most progressive world outlook, the theory and methods of Marxism-Leninism, throughout the entire area of Hungarian science.

Under the conditions of the old Hungary, the neglected and retarded condition of industrial development and of technical development also were characteristic of the natural sciences and the technical sciences. Thus together with the political and economic tasks of the building of socialism the unavoidable task arose of: placing the natural sciences and technical research in the foreground, and their special development.

The basic task in the field of the social sciences consisted of defeating the idealistic, reactionary tendencies pervading the fields of philosophy and the social sciences, rendering the Marxist philosophy universal as soon as possible, and founding the Marxist social sciences in our country. To this task were contributed the necessity of mediation of the field of philosophy in the transformation of all thought in the social sciences, aiding the struggle against the idealistic viewpoints in all fields of science and culture, and of participating in the propagation of the socialist world outlook.

The road to broad-scale pursuit of Marxist social science opened up in Hungary when the power of the labor class became complete, when the capitalist land-holding class suffered a crucial defeat, and when the general socialist transformation of the thinking of men began on a gigantic scale. It is apparent that aside from certain individual researchers who already had the appropriate theoretical preparation and labor movement activity behind them the task of learning the bases of Marxist social science and the teachings of the Marxist classicists, and propagation of these teachings, came to the fore for the pursuers of social science in the period of development which began in 1949.

At the beginning of our development successful research work in the field of the social sciences generally was very well developed. The studies pertaining to Marxist philosophy and to the basic teachings of the social sciences, the Marxist world outlook, on the other hand, were propagated fairly widely. Development accelerated in the later years, but after 1953 progress was retarded by the renovation of certain bourgeois ideologies and revisionist attempts.

Summarizing the developments of the past ten years it may be established that on the whole, that in the course of drawing the conclusions of the counter-counterrevolutionary policy and ideological struggle, the defeat of the revisionist views and attempts, and of the ideological consolidation accompanying our entire consolidation process, after 1957 our entire social science work rose to a higher theoretical level and was deepened with respect to content. It became increasingly clear how creative social science work must pair together with the concrete demands arising from the development of our social conditions, and how the pursuers of the social sciences must perform the appropriate knowledge-disseminating propaganda work together with creative work. At present it may be established that social science work is finally, and essentially properly and healthily, developing parallel with our economic and political development.

Despite the results which have been achieved, we still must contend with numerous problems in the field of the social sciences.

In general our social science research still is not connected closely enough with the present-day problems which are posed with respect to the building of socialism in our country, with respect to our social conditions and with respect to the formation of social science. here are areas in which research satisfies these demands to a greater degree, such as in the field of economics; in other branches of sciences, such as political science, law and philosophy, practice demands that the sciences start out with deeper analysis of our concrete conditions than previously. In certain branches of the social sciences, such as archeology and the history of art, principle-and theory research must be increased. All in all, it still must be demanded of the whole of our social science as a general requirement to place concrete problems brought up by our social and cultural development in the center of research projects and to analyze these problems at a suitable scientific level.

We also must exercise care that the individual branches of our social science do not develop unequally. This is true especially at the ideological kvel. There are considerable differences between our individual social sciences in this respect. In certain branches of science there are difficulties concerning internal proportions. Thus it is apparent, for example, that in the field of philosophy the pursuit of historical materialism has lagged behind dialectic materialism, logic and the history of philosophy; this circumstance. however, is taken into account in the current year's research plan in philosophy and its improvement is planned. Furthermore, it is well known that in the field of geography economic geography has been left far behind natural geography. In the field of political science and law the problems of the structure and organization of the state administration have been somewhat neglected; with respect to these problems the political science and law fields may be stimulated to more rapid development on the basis of the directives of the long-range plan.

It must be established, also, that the Academy has not extended adequate aid to certain branches of sciences, and their relatively slow development may be attributed to this fact, among others. This is true, for example, in the field of teaching; at the present, however, the necessary conditions are in the process of being established.

In the field of the natural sciences and technical research the creation of the conditions for modern research and the development of modern experimental methods understandably have been favored over ideological problems. In this respect the technical and natural sciences, and certain branches of agricultural science started out from very different positions. There were branches of science in which, due to fortunate personnel circumstances, internationally recognized schools had been developed earlier, and in other areas

there was exceptionally great retardation. During the course of development during the past decade or one-and-one-half decades this inequality has been considerably eliminated, but its remnants still may be felt and this situation still causes serious problems.

The ideological and world outlook questions constitute a basic problem in the development of the natural sciences. For a long time the dominant concept was that there is no world outlook problem in the natural sciences, that research in the natural sciences is neutral with respect to world outlook. This point of view, of course, covered mostly vulgar positivist or idealist world outlooks. Although there has been some change in this field at present, much remains to be done.

The previous problems of development arose very differently in the various fields of the natural sciences and the technical sciences, and the present problems of further development are also different.

The main research results of scientific development achieved since Liberation and since the reorganization of the Academy are reviewed in greater detail by the present reporter in a published supplement. At present we may only indicate the main characteristics of Hungarian science.

The greatest achievement in the field of the social sciences is the large-scale expansion of the theory and methods of Marxism-Leninism, although the status in which Marxism-Leninism has become a general characteristic still has not been attained. A further result is that during recent years Marxist social science has produced significant scientific creations, primarily in the fields of economics, history, political science and law, history of literature, and certain branches of philosophy. The upswing which is beginning in pedagogical science also must be considered significant.

In the fields of the natural sciences and technical sciences the numerous and significant new achievements of mathematical research, which previously also had been on a high level, must be noted. Based on great expansion of research conditions, scientific achievements far surpassing previous attainments from the points of view of theory and technology have been attained in the field of physics and chemical research. The greatest development with respect to the past has been achieved in the technical sciences: the advanced and multifaceted Hungarian technical science essentially was born during the past decade, although there are inequalities between its individual branches. There has been similarly great development in the agricultural sciences, although this also is uneven.

The results achieved in the biological and medical sciences and in psychology also surpass the scientific achievements prior to Liberation, and in general the materialist world outlook is gaining increasing predominance in these areas of science, also.

The large-scale development and convincing achievements, however, cannot dim the relative lag in many of our branches of science nor the general shortcoming that our scientific research work still is insufficiently coordinated for resolution of the principal problems arising from our social, economic and cultural development. The development of the long-range scientific research plan represents a great advance along this line. It is certain that this plan lays the foundations for new scientific development.

The Academy has a reputable and increasing role in the national scientific achievements. It is understandable that during the first years following reorganization the effect of the functioning of the Academy was not very apparent in the scientific results, themselves. In 1954 the Academy had only 17 institutes, and these were mostly concerned with the matter of reorganization, therefore their scientific production was unable to mature in these years. At the present time, however, not only have the number of academy research institutes increased, but these institutes may look back upon a past of several years and the results of their scientific research also are appearing in succession.

The scientific results of the functioning of the Academy appear not only in the work of our institutes. We must include here all the research results achieved by the Academy members, themselves, regardless of whether they are working at academy—, or other work sites. In this sense the majority of the more important scientific achievements of the past ten years are connected with the names of members and associates of the Academy. The scientific results achieved by the Academy or through its assistance also are represented by the book publishing activity of the Academy.

The book publishing activity of the Academy, although not representing the publication of independent and new research results in every case, nevertheless represents the scientific achievements in many branches of science. From this point of view we may boast of especially noteworthy achievements. Since the beginning of its activity the Academy Publishing House has published more than 300 scientific monographs containing a scientific treatment of all material on various individual problems. These include many which describe the original results of the experiments of the author, and many which summarize domestic and international research. Many of the latter fill gaps in Hungarian scientific literature.

Another important trend in our book publishing, and one which supplemented shortcomings of decades' duration, is the publication of source material and documentation which earlier were inaccessible except in the narrowest field of the researchers, and the lack of their publication greatly hindered the expansion and advancement of scientific work. The latter include equally, works on the history of literature, history, the history of art, archeology, linguistics and the history of science.

The products of our book publishing activity which are of outstanding significance include the successful publication of such great works at the new Hungarian Lexicon, the Dictionary of the Hungarian Language, and the books on the fauna and horticultural plants of Hungary. These works were produced with very large amounts of equipment and through successful struggling with extraordinarily numerous hindrances, and the criticism which the first copies received prove that the faults which are unavoidable in such multifaceted works do not surpass the tolerable level, and that the material contained therein represents significant value not only from the point of view of science, but also satisfied a broad-scale common need.

Our foreign-language publications and the Acta have an outstanding role in the international propagation of the results of Hungarian science. At present the problem connected with these publications is that of distribution, because we cannot be satisfied with the existing distribution. The presidium dealt with this problem in this sense, and took measures in the interest of utilization of new distribution possibilities.

Despite the considerable achievements, there are also problems in our book publication. There is great disporportionality between the individual branches of science, and the publication of sociological works is especially inadequate. In addition, the political-ideological level of our publications also must be improved. Another important task is that of increasing the role of our central periodical, Magyar Tudomany Hungarian Science, Our last plenum dealt with this problem, also. The result still is not satisfactory, however, and thus we still have further tasks in this field.

The results of scientific work conducted within the framework of the Academy appear primarily in the form of the publications released, and in a considerable portion of the sciences this form also represents the end product of scientific work. In several branches of science, however, primarily the applied sciences (technical, agricultural and medical sciences), publication of the research result is only the starting point from the point of view of practical consumption. It is understandable, therefore, that since reorganization the connection between science and practice has been a reoccurring problem within the Academy, and one which is discussed with special attention.

The Academy, in conformance with its task as established in law and in the charter, has attempted to create multifaceted and closer connections between science and practice, and has achieved definite results along this line.

In this connection the law pertaining to the reorganizations of the Academy defines the task of the Academy as "deepening the connections between theory and practice in accord with the spirit of progressive science." According to the Constitution the duty of the Academy is that of "furthering creative cooperation between

scientific work and practical life." The experiences in Hungary during the past decade and in the other socialist countries prove that this goal determined by the law and by the Constitution was correct. The Academy exerted efforts for the fulfillment of this role and achieved definite results, although it was unable to effect close cooperation between scientific work and practical life.

With respect to the future tasks of the Academy the original goal must continue to serve as the basis, and more effective methods must be found on the basis of the experiences gained. In this connection two matters must be taken into consideration.

The Academy cannot be required to assume the tasks of technical development. This is a problem of production, and its organization and direction may be performed by the organizations responsible for production. This is the task of the technical development councils which are in the process of being formed. It is the task of the Academy as a scientific body, however, to further the connections between science and practice, and to further the work of technical development through its members andinstitutes.

It is the peculiar task of the Academy to further the creative cooperation of theory and practice through direction of its scientific work toward the solution of the vital problems of practice, satisfaction of the demands of society, and resolution of the problems of the building of socialism. Increased realization of this striving creates creative cooperation between basic research and applied research, and between technical development, education, the public health service, the practical work of the cultural revolution, and of practice in general. One of the basic means of the realization of this striving is the development of proper research plans, but also includes the further adivity in which the Academy continuously conducts the work of its institutes, committees and other scientific institutions in this direction.

DEPARTMENTAL MEETINGS AT THE GENERAL ASSEMBLY OF THE HUNGARIAN ACADEMY OF SCIENCES

Pages 341-343

Unsigned Article

The Hungarian Academy of Sciences held its 118th general assembly between 10 and 14 April. The general assembly opened on 10 April with a joint session in the great hall of the Academy. Present at the opening session were Karoly Kiss, member of the Policy Committee of the Hungarian Socialist Labor Party and secretary of the Central Committee, Laszlo Orban, member of the Central Committee and head of the Academic and Cultural Committee of the Central Committee, Sandor Szerenyi, member of the Central Committee and vice head of the Academic and Cultural Department, members of the Academy, personnel of the institutes, and outstanding personalities of academic and cultural life.

The general assembly was opened by Istvan Rusznyak, president of the Hungarian Academy of Sciences, who was followed by Dezso Nemes, corresponding member of the Academy and member of the Policy Committee of the party, presenting an address entitled "The Development of the People's Hungary from 1945 to 1960."

Each department held separate sessions within the framework

of the general assembly.

The Linguistics and Literature Department and the History of Literature Institute of the Hungarian Academy of Sciences held a two-day session on 11 and 12 April on the literary manifestations of nationalism. Within the framework of this session, on 11 April, Tibor Klaniczay, doctor of literature, presented a report entitled "The Predecessors of Nationalism in Hungarian Literature," and Dezso Toth, candidate of literature, presented a report entitled "The Development of Bourgeois Nationalism in Hungarian Literature." On 12 April scientific researcher Sandor Somogyi presented a report entitled "Nationalism in the Literature of the Period of Autogracy and Dualism." The debate-introductory theses of Miklos Szabolcsi, head of a section of the History of Literature Institute, dealt with several problems of nationalism and the most recent Hungarian literature. (The reports and the debate which followed are described elsewhere in the present publication.)

On 13 April Istvan Soter, corresponding member of the Academy, presented the departmental leadership report, which was followed by lively discussion and debate.

The meetings of the Social Sciences and History Department began on 11 April with the report of Laszlo Nagy, candidate of political science and law, entitled "Several Problems of the State Direction of Producer Cooperatives." The report was followed by several co-reports and debate.

On 12 April Erik Molnar, academician, presented a report, entitled "Ten Years of Hungarian Historiography." During the all-day session on 13 April Istvan Friss, corresponding member of the Academy and member of the Central Committee of the party, presented a report entitled "The Seventh Congress of the Hungarian Socialist Labor Party and the Tasks of the Field of Economics." (Both reports and the following debate are reported in detail in the following.)

Academician Imre Szabo reported on the work of the departmental leadership on 11 April. Many comments followed the very interesting report.

The first report of the Mathematics and Physics Department was presented by Lenard Pal, doctor of physics, on 11 April, who reported on individual scientific works conducted at the Central Physics Research Institute. The first report on 12 April was presented by academician Lajos Janossy, and was entitled "On the Problem of Measurement Evaluation of Probability Computation Considerations." The report dealt with the processing by statistical-mathematics and probability computation methods of numerical data obtained in the course of physics experiments, and hypothetical investigations connected with the former. This was followed by the report of Alfred Renyi, academician, entitled "Some Basic Questions of the Theory of Information." On 13 April Academician Gyorgy Hajos gave a ceremonial address commemorating the one-hundredth anniversary of the death of Janos Bolyai, and on his geometric activities.

On 11 April Academician Gyorgy Hajos gave the departmental leadership report, which described the development during the past ten years in the fields of mathematics, physics and astronomy.

The general assembly reports of the Agricultural Sciences
Department dealt with the problem of the producer cooperatives, i.e.
with problems connected with the producer cooperatives. On 11 April
Laszlo Stenczinger, candidate of agricultural sciences, presented a
report, entitled "Main Business-Organization Problems of the Producer
Cooperatives." On 12 April Vice Minister Andras Magyari, doctor of
biology, presented a report entitled "Increasing Meat Production in
the Socialist Large-Scale Farms." Both reports were followed by
debate, which is described elsewhere in the present periodical.

On 13 April Academician Andras Somos gave the departmental leadership report, which was followed by lively debate.

On 12 April the Biological and Medical Science Department heard with great interest the report of Academician Istvan Rusznyak and of the members of the research group under his direction: Miss Zsuzsa Hollan and Ervin Stark, candidates of medical sciences, and Mihaly Foldi, doctor of medical science, on work which has been carried on for many years in the Experimental Medicine Research Institute. Istvan Rusznyak and his associates proved that local tissue decomposition and anemia may be prevented through the removal, or diminution of the functioning of certain glands of internal

secretion. On the same day Corresponding Member Bela Kellner reported on his investigations on the progression of cancer and the formation of metastasis. His investigations are of practical significance from many points of view.

The departmental leadership report was presented on 11 April by Academician Antal Babics.

The Technical Sciences Department began its reports on 11 April with the report of Academician Elemer Szadeczky-Kardoss, dealing with the significance of the new domestic geochemical research trends. The reporter also described the investigations which made possible computation of the element migration between the cuter zones of the Earth.

Academicians Gyorgy Szigeti and Erno Winter, and Corresponding Member Tivadar Millner presented a review of the public economy importance, and perspectives of technical physics research being conducted in the vacuum technology industry on 12 April. The report of Gyorgy Szigeti discussed the mutual effects of research connected with the properties of solid bodies and the vacuum technology industry, and the connections between industry, technical development and science. Erno Winter dealt with investigations conducted to date in the field of the electronic tube industry and the research tasks of the future, and of the possibilities deriving from the competition between the transistor and the electronic tube. The report of Tivadar Millner described domestic tungsten research which has had a considerable role in recognition of the fact that many useful properties of metals are eliminated and ensured by the presence of very slight impurities.

Laszlo Egyed, doctor of geology and mineralogy, presented his theory of the dynamics and expansion theory of the formation of the Earth, which modifies the previous views with respect to the origin of the solar system.

Corresponding Member Imre Razso dealt with the problem of the influence of mechanization upon soil cultivation, with special attention to deep plowing. Following this report, which was jointly organized with the Agricultural Sciences Department, co-reports were given by Candidates of Agricultural Sciences Sandor Forgeteg, Sandor Terlandai and Zoltan Fekete, Department Head Karoly Lammel, and Doctor of Agricultural Sciences Erno Kemenesy.

On 13 April, also in a session jointly arranged with the Agricultural Sciences Department, Minister of Construction Rezso Trautmann presented his report for the degree of Candidate of Technical Sciences, entitled "The Construction Policy of Agriculture." In his report he stated that meeting the demands of socialist agriculture places a great task before the field of construction. For the purpose of efficient development of the national network of settlements regional plans are being developed, taking into account the geographical and economic characteristics of the region of the country, and the presently existing settlement-network. The report

was followed by co-reports given Karoly Perczel, Gyorgy Gerle and Viktor Hergar, department heads of the Ministry of Construction.

On 11 April the departmental leadership report was presented by Academician Sandor Geleji.

Under the auspices of the Chemistry Department, Academician Laszlo Erdey presented a report, entitled "The Status and Main Directions of Development of Analytic Chemistry." on 13 April. In his report he established that economic production and improvement of quality are unimaginable without application of the modern methods of chemical analysis, and stated that there is very great need for forceful development of this field. In connection with this report, co-reports were given by Candidates of Chemistry Anna Schneer, Laszlo Mazor and Imre Krausz.

The departmental leadership report was given on 11 April by Academician Tibor Erdey-Gruz. The report was followed by a full day of discussion and debate.

On 13 April the Biology Group heard the report of Academician Rezso Soo on research in the fields of the plant geography of Hungary and of ontogeny. The reports on domestic use of isotopes were followed with great interest. Candidate of Medical Sciences Jozsef Tigyi reported on research conducted at the Biophysics Institute of the Pecs Medical School, Tamas Garzo reported on research at the Medical Chemistry Institute of the Budapest Medical School, and Academician F. Bruno Straub presented a report in which he surveyed experiences of the past ten years in isotope research in Hungary.

The leadership report of the Biology Group was presented on 11 April by Academician Jeno Ernst, which was followed by several co-reports.

On 13 April Academician Pal Gegesi Kiss presented a report describing the activity and tasks of the Psychology Committee, which was established since the last general assembly. Following this report, comments were made by Gusztav Barczy, Director of the Therapeutic Pedagogics College, Doctor of Medical Sciences Bela Horanyi, Candidate of Political Science and Law Miklos Kadar, Doctor of Education Lajos Kardos, scientific researcher Ferenc Lenard, scientific research Lucy P. Liebermann, Corresponding Member Laszlo Matrai, Director of the Child Psychology Institute Imre Molnar, and Candidate of History of Art O. Gabor Pogany.

PRESENTATION OF AWARDS AT THE CXX GENERAL ASSEMBLY OF THE HUNGARIAN ACADEMY OF SCIENCES

Pages 343-346

Unsigned Article

The Hungarian Academy of Sciences held its 120th general assembly on 14 April. Those present at the morning open session of the general assembly included Istvan Dobi, president of the presidium of the People's Republic, Gyula Kallai, member of the Policy Committee of the Hungarian Socialist Labor Party, secretary of the Central Committee, and first vice president of the Council of Ministers, Dezso Nemes, member of the Policy Committee of the party, Istvan Friss and Sandor Szerenyi, members of the Central Committee of the party, and many outstanding personalities of science and cultural life. The session was opened by Istvan Rusznyak, president of the Hungarian Academy of Sciences, followed by Gyula Kallai who conveyed the warm, brotherly greetings of the party central committee and of the government, and by an address by Istvan Dobi.

Permit me -- he said -- to greet you warmly, esteemed members of the Academy and all participants in the academy's general session, in the name of the Presidium of our Republic.

Our people celebrated the fifteenth anniversary of their liberation in the near past. The fifteenth anniversary of the liberation of our country coincides with the tenth anniversary of the reorganization of the Academy of Sciences. The merging of these two anniversaries is not accidental. The legal unification of these events are enabled by the great possibilities which were opened to the development of the sciences by the great events of the liberation of our people.

In his address he also emphasized the fact that the Academy, now resting on new bases, has for the most part successfully resolved the tasks which have been placed before it. Hungarian science has risen to a level greatly surpassing earlier levels.

The party and the government at present, and always have supported the successful activities of the Hungarian Academy of Sciences in the interest of the development of domestic science. This support was expressed in the increase in the number and the material support of the research institutes which have been established during the past ten years, and in the increased furtherance of research conducted at academic chairs. Recognition also is expressed in the fact that of the academicians and academy personnel 125 have received the Kossuth Price and 274 have received various government awards for outstanding achievement in the pursuit of science. Now, on the occasion of the fifteenth anniversary of the liberation of our country and the tenth anniversary of the reorganization of the

Academy, by way of recognition of a decade of work the Presidium of the Hungarian People's Republic felt the necessity of acknowledging the valuable work of our pursuers and organizers of science with the granting of a large number of awards.

The Hungarian Socialist abor Party and the Revolutionary Labor-Peasant Government continue to afford effective support to scientific research work, the activity which serves the development of our domestic sciences. This science is an integral element of culture, it furthers practical change of the world through discovery of natural laws and places the forces of nature in the service of society. The various sciences must provide answers for the problems which the rapid advance of production in our country, deriving from the building of socialism, places on the daily agenda. The connections between, and the productive cooperation between the sciences and practice, which is the sole proof of the reliability of science, and between the men of science and production personnel. The party and the government trust that the scientists working within the framework of the Hungarian Academy of Sciences will through their scientific work further even more effectively than in the past the common goal, the complete building of socialism in our country.

The speaker emphasized that although the government awards are addressed to individuals, through these individuals the government expresses its recognition of scientific personnel in general and of its esteem for the Hungarian Academy of Sciences.

Following his address, Istvan Dobi gave the awards to the scientists and scientific personnel who have attained outstanding achievements in scientific, and scientific organization work since the reorganization of the Academy.

The Presidium granted the Award of the Order of Labor Red Banner to:

Academician Rezso Manninger, college professor andhead of an academic chair at the College of Veterinary Medicine, and to Academician Elemer Vadasz, professor and head of an academic chair of the Department of Natural Sciences of the Eotvos Lorand University.

The Order of Labor was awarded to:

Academician Antal Babics, professor andhead of an academic chair of the Budapest Medical School, and departmental secretary of the Biology and Medical Sciences Department of the Hungarian Academy of Sciences; Gyorgy Bernat, director of the Academy Publishing House; Academician Geza Bognar, secretary of the Hungarian Academy of Sciences; Academician Tibor Erdey-Gruz, university professor and departmental secretary of the Chemistry Department of the MTA Magyar Tudomanyos Akademia -- Hungarian Academy of Sciences; Academician Laszlo Erdey, professor and head of an academic chair of the Budapest Polytechnical University; Peter Erdos, candidate of economics and scientific associate of the Economics Institute of the MTA; Academician Gyorgy Hajos, professor and head of an academic chair

of the Department of Natural Sciences of the Ectvos Lorand University, and departmental secretary of the Mathematics and Physics Department of the MTA; Academician Lajos Janossy, professor andhead of an academic chair of the Department of Natural Sciences of the Eotvos Lorand University, secretary of the MTA; and director of the Central Physics Research Institute; Academician Lajos Ligeti, professor and head of an academic chair of the Ectvos Lorand University, and vice president of the MTA; Corresponding Member Odon Rajka, former departmental secretary of the Biology and Medical Sciences Department of the MTA: Academician Andras Somos, professor and head of an academic chair of the Horticultural and Viticultural College, and departmental head of the Agricultural Sciences Department of the MTA: Academician F. Bruno Straub, head of the Medical Chemistry Institute of the Budapest Medical School; Academician Imre Szabo, university professor, director of the Political Science and Law Institute, and departmental secretary of the Social Science and History Department of the MTA; and Academician Imre Trencsenyi-Waldapfel, professor and head of an academic chair of the Philosophy Department of the Eotvos Lorand University.

The Medal "For Socialist Labor" was awarded to: Tamas Acs, associate of the Histology and Ontology Institute of the Budapest Medical School; Andras Babics, candidate of history, and associate of the Transdanubian Scientific Institute of the MTA: Istvan Berecz, scientific associate of the Debrecen Atomic Nucleus Research Institute of the MTA: Erno Boszormenyi, candidate of medical sciences and former specialty secretary of the Biology and Medical Sciences of the MTA; Laszlo Csete, candidate of economics and assistant departmental secretary of the Agricultural Sciences Department of the MTA: Gyula Fabian, candidate of biology and head of the Godollo Animal Genetics Research Group; Jozsef Garamvolgyi, specialty secretary of the Linguistics and Literature Department of the MTA: Laszlo Hazai, chief lecturer of the Mathematics and Physics Department of the MTA; Jozsef Juhasz, scientific associate of the Linguistics Institute of the MTA: Miss Ibolya Kardos, specialty secretary of the Chemistry Department of the MTA: Laszlo Koch, responsible editor of the Academy Publishing House; Sandor Konya, specialty secretary of the Social Science and History Department of the MTA; Istvan Kovacs, candidate of agricultural sciences and scientific associate of the Martonvasar Agricultural Research Institute; Lajos Nyiro, scientific associate of the History of Literature Institute of the MTA; Marton Pecsi, candidate of geography and section head of the Geografic Research Group of the MTA: Pal Rozsa, candidate of mathematics and scientific associate of the Mathematics Research Institute of the MTA: Vilmos Sandor, candidate of history and section head of the History Institute of the MTA: Mrs. Belane Singer, chief lecturer of the Experimental Bureau of the MTA; Ervin Stark, candidate of medical sciences and vice head of the Experimental Medicine

Research Institute of the MTA; Bela Szabo, chief lecturer of the Debrecen Atomic Nucleus Research Institute of the MTA; Mrs. Laszlone Szabolcsi, candidate of biology and vice head of the Biochemistry Institute of the MTA; Lajos Szanto, associate of the Academic and Cultural Department of the Central Committee of the Hungarian Socialist Labor Party, and past chief lecturer of the MTA Bureau; and Bela Toth, former academic chair researcher of the Technical Sciences Department of the MTA.

The Order of Labor was awarded to:

Laszlo Alpar, scientific associate of the Mathematics Research Institute of the MTA; Mrs. Antalne Bardos, lecturer of the Bureau of the MTA; Katalin Becht, scientific assistant of the Economics Institute of the MTA; Mrs. Arpadne Budai, lecturer of the MTA Bureau; Istvan Buki, shop superviser of the Academy Publishing House; Jozsef Marticsko, academic chair researcher of the Linguistics and Literature Department of the MTA; Tibor Nemeth and Gyorgy Pataki, scientific associates of the Technical Physics Research Institute of the MTA; Mihaly Szigeti, responsible editor of the Academy Publishing House; and Jozsef Szokira, group leader of the MTA Bureau.

Academician Rezso Manninger delivered an address expressing thanks on behalf of the persons decorated.

First Secretary Ferenc Erdei presented the Presidium report, and the general assembly continued in the afternoon with a closed session.

The agenda on the session included:

- 1. Discussion and debate of the presidium report and the resolution recommendation;
- 2. Modification of the Academy charter:
- 3. Election of new members;
- 4. Appointment of various Academy officers.

Prior to the debate President Istvan Rusznyak spoke in remembrance of I. P. Bargyin and Jozsef Revai, honorary members, and Jeno Egervary, Bela Entz, Lipot Fejer, Bela Entz, Lipot Fejer, Bela Fogarasi, Geza Hetenyi, Karoly Jordan, Imre Szorenyi and Laszlo Verebely, academicians and corresponding members, who had died since the last general assembly.

Antal Babics, Tibor Erdey-Gruz, Gyula Hevesi, Lajos Ligeti, Laslo Redey, Elemer Szadeczky-Kardoss, Sandor Szalai, Gyorgy Szigeti and Balint Zolyomi, academicians and corresponding members, spoke before the Academy in the discussion and debate of the Presidium report and resolution recommendation. Following the debate the general assembly approved the Presidium report and the resolution recommendations.

Antal Babics, Gyorgy Csanadi, Tibor Erdey-Gruz, Sandor Geleji, Gyula Hevesi, Lajos Janossy, Bela Kellner, Istvan Kovacs, Imre Szabo and Jæsef Waldapfel, academicians and corresponding members of the Academy, spoke in the discussion and debate of the recommendation pertaining to modification of the charter.

Following approval of the charter modification the general assembly elected new members.

Elected to regular membership in the Academy, were:
Corresponding members Ambrus Abraham, Agoston Budo,
Istvan Friss, Mate Major, Geza Petenyi, Jozsef Schandl and Janos
Suranyi;

Elected as corresponding members, were:

Doctors of science Laszlo Cholnoky, Laszlo Egyed, Gyula Foldessy, Lajos Hatvany, Gabor Kolozsvary, Mihaly Seidner and Gyula Weiszfeiler.

Named as honorary members of the Academy, were:

Parasitologist K. I. Skyabin, member of the Academy of Sciences USSR, microbiologist P. G. Sergiyev, member of the Academy of Medical Sciences USSR, philosopher P. N. Fedoseyev and metallurgist A. M. Samarin, corresponding members of the Academy of Sciences USSR, physicist Robert Rompe and chemist Gunther Rienacker, regular members of the Academy of Sciences of Germany, Berlin.

Ethnographer Kustaa Vilkuna, regular member of the Academy of Sciences of Finland, was elected external member of the Academy.

The general assembly also decided upon appointments to certain offices of the Academy. Academicians Gyula Hevesi and Rezso Manninger were elected as new vice presidents, in addition to the existing number of vice presidents. In the future the secretaries of the Academy will function as assistant first-secretaries; Academician Imre Szabo was elected as a new assistant first secretary.

Finally, the general assembly composed the following telegram to Janos Kadar, First Secretary of the Central Committee of the Hungarian Socialist Labor Party, and to Dr. Ferenc Munnich, President of the Revolutionary Labor-Peasant Government:

"The anniversary general assembly of the Hungarian Academy of Sciences expresses its gratitude and thanks to the party and the government for their honoring confidence and support evidenced with regard to the Academy. Our general assembly has placed before the Academy the goal of serving the building of socialism with greater energy and more effectively in the future."

The 120th general assembly of the Academy was closed with the closing address of Istvan Rusznyak.

RESOLUTIONS ADOFTED AT THE CXX GENERAL ASSEMBLY OF THE HUNGARIAN ACADEMY OF SCIENCES

Pages 346-348

Unsigned Article

The 1960 general assembly of the Hungarian Academy of Sciences established that the Academy, reorganized by law No. XXVII of 1949, has generally fulfilled the role entrusted to it in the fields of creative scientific work, and the organization and development of scientific work: it has become the highest scientific body of the Hungarian People's Republic and the recognized center of domestic scientific life, it has achieved international recognition, and bears an increasing share in the building of socialism through its scientific foundings and support.

The individual tasks of the Academy have been considerably modified in the course of historical development, and practice has in many respects changed the conditions and possibilities of academy activity. Because of this, on the basis of the experiences of the past decade and in accord with the latest demands of the building of socialism, a new determination of the tasks of the Academy and definition of the main directions of academy activity for realization of these tasks became necessary. In conformance with this the general assembly resolved the following:

- 1. The chief task of the Academy is the creative pursuit of science, and for the furtherance of this task, the organization, direction and coordination of research, partly in the field of theoretical and experimental basic research, and partly through research of a theoretical nature in the field of the applied sciences. In its scientific activity the Academy must ensure that the socialist world outlook, and the theory and method of dialectic and historical materialism shall become universal in the entire field of scientific life. The Academy already has partially fulfilled this duty during the past period, and as was established by committee investigations during the past year certain academy institutes have become outstanding work sites in their fields in respect to both scientific and ideological points of view, although the majority of the institutes still await multifaceted development. Because of this, in the coming period deserving problems of scientific work and the professional and ideological development of the research institutes must be placed at the center of Academy activity and the appropriate measures must be taken.
- (a) The directing organs of the Academy must devote special attention to the academy research institutes, to their scientific and ideological development, and must strive for continuous improvement of scientific work conditions within the institutes and at the work sites of the academy members in general.

- (b) The academic chair research and research-goal grants, which constitute a considerable portion of the research conditions available to the Academy, must be considered as an organic part of academy research, and must be placed in the service of the resolution of scientific tasks with organization similar to that of the institutes and in conformance with plan.
- (c) The general assembly places before the academy institutes (acadmic chair research groups and work cooperatives) as a primary goal the task of becoming professional and ideological centers of their scientific fields, and to exercise a directing influence upon the whole of their fields of science through the methods and results of their scientific work.
- (d) In the interest of acceleration of the development of the academy research institutions the General Assembly calls upon the Presidium to provide for the appropriate organizational measures for the furtherance of development of the institutes, academic chair and other research-goal support, in conformance to plan, and in the interest of coordination of the work of the scientific departments along this line.
- 2. The Academy also considers as its task the exertion of a theoretical-methodological influence upon theoretical and experimental basic research, and upon research conducted in research institutes of the ministries from the point of view theoretical research in the applied sciences, without administrative intervention. Because of this, this type of activity of the organs of the Academy also must be developed.
- (a) The committees of the Academy must be gradually developed into national scientific forums, recognized in their branches of science, which shall survey the development of their branch of science and shall express opinions and develop recommendations.
- (b) In the field of the academy's book and periodical publishing activity and in the field of conferences and congresses the Academy must bear in mind the needs of all scientific life in Hungary, and shall exercise its theoretical-methodological leadership role in this respect, also.
- (c) In general theoretical problems of scientific work the Academy shall formulate its standpoint with responsibility commensurate with its increasing social role, shall represent this standpoint in the interest of the whole of Hungarian science before the directing organs of scientific life, and in the future shall increase its participation in the national direction of scientific life through recommendations and original undertakings.
- 3. The Academy has basic tasks in the development of the long-range research plan. Although the Scientific and Higher Education Council effects national coordination of the plans, responsibility for meritorious scientific work to a great degree

lies with the Academy. Because of this the members and institutes of the Academy must take a very great role in the development and realization of the scientific research plans.

- (a) The main scientific research tasks entrusted to the Academy must be considered as the basis of the academy research plans, and beginning with next year the annual research plans of the academy institutes must be developed and approved in conformance with this.
- (b) Measures must be taken to ensure representation of the Academy in the committees charged with preparation and coordination of the main research tasks entrusted to other national organs commensurate with the scientific responsibility of the Academy. In addition, the academy institutes also must participate within the limitation of possibilities in the resolution of these research tasks.
- (c) The organizational framework of the long-range scientific research plan must be utilized to ensure realization by the Academy of organized and effective cooperation with the ministries and with the ministry research institutes.
- 4. A very important task of the Academy is the furtherance of the scientific cadre replacement program, and in this respect it must act with initiative, together with the interested ministries, universities and colleges.
- (a) Whereas the Academic Qualification Committee is under the supervision of the Academy, the Academy must assume responsibility for academic qualification and must do all within its power for the improvement and greater plan-conformity of work along this line.
- (b) An absolute requirement for replacement of scientific researchers is that of effecting a substantial expansion in the possibilities of foreign study tours for young researchers, especially with respect to enabling foreign study tours of longer duration. The Academy must resolve this task in cooperation with the interested state organs, together with determination and better exploitation of possibilities.
- (c) In the interest of scientific development the Academy must deal separately and directly with the development of the most promising young researchers. Therefore, both the Presidium and the departmental leadership must maintain the replacement plan on their daily agenda, both the directing bodies of the Academy and the individual academy members must further to the greatest possible extent the development of these young researchers.
- 5. The Academy serves the furtherance of the building of socialism and of the social, economic and cultural development of the country primarily through resolution of the tasks established in the long-range research plan, and is the primary means by which

it realizes the unity of theory and practice in its work. In the sewice of this goal, however, it is desirable that the Academy seek direct connections with the field of practice through its members, committees and institutions, and establish mutually useful cooperation with certain especially important industrial, agricultural and transportation enterprises and other institutions which are to be further developed. The following are particularly important in this respect:

- (a) The Academy should include in its publishing plan the publication of good-quality informative works, following the successful example of the academies of certain socialist countries, which summarize contemporary knowledge and the socialist world outlook in individual fields of production and cultural life in popular language but with scientific thoroughness. In this connection the Presidium should investigate the possibility of publication of an informative small-book series.
- (b) In the future the Academy should participate to the extent of existing possibilities in national and international exhibits which would enable the Academy to demonstrate its scientific achievements on an appropriate level before the greatest public possible.
- (c) The Academy Presidium, departmental leadership and committees should express opinions in social problems of common interest which have theoretical or general political importance, and in which the expression of a standpoint by the scientific body would further clarifycation of the various points of view and the formation of popular opinion in the proper direction.
- 6. The international connections of the Academy, which happily have been expanded, must be developed further. The primary goal should be that of ensuring that the scientific relations which have been established with countries of the socialist camp shall become more permanent, and that ever higher forms of cooperation be realized in conformity with the international division of labor which increasingly is developing among countries of the socialist camp in the field of scientific work. addition the Academy, as the recognized international representative of all Hungarian science, should expand its relations with an increasing circle of the scientific life and scientists of the entire world in the interest of peaceful cooperation and scientific development. International connections should be developed not mainly through large conferences of a representative nature, but in a manner which will serve the exchange of scientific results and the deepening of scientific work relations.

7. In the interest of further development of the scientific direction activity of the Academy the present framework of the scientific departments must be examined from the point of view of whether they are adequate to the tasks of the coming years. Therefore, the Presidium, in cooperation with all the scientific departments, should place on the agenda the problem of regulation of the sciences and their appropriate apportionment according to scientific departments so that it may submit a recommendation with respect thereto on the occasion of the convocation of the next general assembly.

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